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PCT/NO99/00266



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<u>CLAIMS</u>

- 1. The use of a cell in the preparation of a medicament for treating a CNS tumour; wherein the medicament comprises an encapsulated producer cell capable of expressing a molecule which is an inhibitor of CNS tumour growth; wherein the encapsulation matrix is an immunoisolating alginate; and wherein said molecule is:
- a molecule that is capable of interacting with tumour/host communication pathways
 (e.g. a protein, a peptide or a polysaccharide);
- b) a molecule (e.g. a photein, a peptide or a polysaccharide) that is capable of affecting tumour neovascularization;
- c) a molecule (e.g. a protein, a peptide or a polysaccharide) that is capable of interfering with the relationship of the tumour cell with the extracellular matrix; or
- d) a monoclonal antibody capable of interacting directly with a receptor of the tumour, wherein said monoclonal antibody binds to or interacts with platelet derived growth factor receptors AA and BB, acidic and basic fibroblast gorwth factor receptors, transforming growth factor receptor alpha and beta, different classes of vascular endothelial growth factor receptors (VEGFR-1 and VEGFR-2), tyrosine kinase receptors with immunoglobulin-like and EGF-like domains such as, for instance, TIE-1 and TIE-2/tek, hepatocyte growth factor (scatter factor); CD-44; CDF/cyclin complexes; glycolipids on the cell surface; glycoproteins; and proteins derived from the expression of specific oncogenes.
- 2. The use according to claim 1, wherein said expression of said molecule is capable of being switched on and off by an external pharmacological agent.
- 3. The use according to claim 1 or claim 2, wherein the alginate has a G content of above 15%, preferably above 50%.
- 4. The use according to any preceding claim, wherein the alginate has a G content of 60%-80%.
- 5. The use according to any preceding claim, wherein the alginate has a G content of 80%-100%.



- 6. The use according to any preceding claim, wherein the encapsulated producer cell is present in a bead or a microbead.
- 7. The use according to any preceding claim, wherein said CNS tumour is a brain tumour.
- 8. The use according to any preceding claim, wherein the alginate is of a high-purity, endotoxin free quality.
- 9. The use according to any preceding claim, wherein the preparation of the medicament comprises encapsulating producer cells in a one-step procedure.
- 10. The use according to any preceding claim, wherein the preparation of the medicament comprises the drop-wise addition of an alginate solution containing viable cells to a calcium solution.
- 11. The use according to any preceding claim, wherein the encapsulated producer cell has an alginate concentration which rises to the outer rim of the capsule.

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